Paper No. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOHN C. GOODWIN III

Appeal No. 2000-0229
Application No. 08/603,005

ON BRIEF

Before THOMAS, LEVY, and BLANKENSHIP, Administrative Patent Judges.

LEVY, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection[1] of claims 1-17, which are all of the claims pending in this application.

[1] The amendment (Paper No. 9, filed August 24, 1998) filed subsequent to the final rejection has been denied entry by the examiner (Paper No. 10, mailed September 9, 1998).

BACKGROUND

Appellant's invention relates to an auxiliary display recognition system and method for an electronic price label system. An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced as follows:

1. A system for utilizing a plurality of auxiliary displays of different types with each of the auxiliary displays of each type having a type designation, recognizing the type of an auxiliary display attached to an electronic price label, and helping to ensure that the correct type of auxiliary display is attached to the electronic price label comprising:

a number of auxiliary display recorders which sense a number of indicators on the auxiliary display;

wherein the indicators are arranged in a predetermined pattern which uniquely identifies the type designation for the auxiliary display; and

circuit means coupled to the auxiliary display recorders for determining the type designation of the auxiliary display from the pattern.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Hellsberg	4,602,151	Jul. 22, 1986
Poland	5,401,947	Mar. 28, 1995
Ahlm	WO 94/23381	Oct. 13, 1994

Claims 1, 2, and 5-17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ahlm in view of Poland.

Claims 3 and 4 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Ahlm in view of Poland and further in view of Hellsberg.

Rather than reiterate the conflicting viewpoints advanced by the examiner and appellant regarding the above-noted rejections, we make reference to the examiner's answer (Paper No. 15, mailed March 15, 1999) for the examiner's complete reasoning in support of the rejections, and to appellant's brief (Paper No. 14, filed December 21, 1998) and reply brief (Paper No. 16, filed May 17, 1999) for appellant's arguments thereagainst. Only those arguments actually made by appellant have been considered in this decision. Arguments which appellant could have made but chose not to make in the brief have not been considered. See 37 CFR 1.192(a).

OPINION

In reaching our decision in this appeal, we have carefully considered the subject matter on appeal, the rejections advanced by the examiner, and the evidence of obviousness relied upon by the examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, appellants' arguments set forth in the briefs along with the

examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer. Upon consideration of the record before us, we affirm-in-part.

We begin with the rejection of claims 1, 2, and 5-17 under 35 U.S.C. § 103(a). As evidence of obviousness, the examiner offers Ahlm considered with Poland.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985); ACS Hosp. Sys., Inc. v. Montefiore

Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole. See id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976).

The examiner's position (answer, pages 3-4) is that "Ahlm differs from appellant's invention in that it only indicates if a bar code is preset or absent on the label rather than indicating whether a read bar code is in the proper location." To overcome this deficiency in Ahlm, the examiner turns to Poland for a teaching of an electronic price label system which searches a product location table for the label information read from the tag to verify or ensure that the tag is in the proper location.

Appellant asserts (reply brief, page 1) that "appellant's brief raised as the central issue for review the lack of suggestion to combine the relied upon references." Appellant

further asserts (brief, page 9) that Ahlm does not teach or suggest "determining the type designation of the auxiliary display from the pattern;" the "utilization of a plurality of auxiliary displays having different types," nor "help[ing] to ensure that the correct type of auxiliary display is matched with an electronic price label" and that "similar distinctions exist with respect to [independent] claim 5." (See also reply brief, pages 4-6). Appellant asserts (brief, page 9) that Poland does not make up for the failings of Ahlm because "While Poland addresses printing of price labels of different sizes and the like, it does not appear to provide any mechanism like that presently claimed for assuring that the correct label is matched with an electronic price label." Appellant further asserts (reply brief, page 4) that the examiner has improperly construed the language of the claims.

From our review of the record, we agree with the examiner that the teachings of Ahlms and Poland suggest the language of claims 1, 2, and 5-17, for the reasons which follow. Ahlm discloses a system for electronic price labels. In the Background of the Invention, Ahlm recognizes the need for transferring information from a central data base to the edges of shelves where articles are located. Electronic price labels

utilize a display for information such as a price, and printed labels for information that changes infrequently. Ahlm discloses (page 3) that "A shop may be provided with a number of shelf edge displays, price boards and other devices working according to already disclosed principles having up to a number of about 5000 units. This corresponds to the number of articles in a normal supermarket." As shown in figures 1a and 1b, unit 10 contains display 17 and label 12 which represents the type of merchandise as text and a picture. On the back of the label is a printed bar code 14. Information is read from the bar code by a conventional bar code reader 16. Unit 10 contains a memory having information received from a data base of a central processor, which sends the same information to all of the units. Data corresponding to the information read from the bar code is fetched from the memory in unit 10 and is displayed at 17. In the example given by Ahlm, the text and picture displayed on the label represent green apples. When the bar code for green apples is read, the price for green apples will be displayed.

Turning to Poland, this reference is also directed to an electronic price display for displaying current pricing information on retail product shelf edges (col. 1, lines 6-8). In Ahlm, the price is displayed according to the location of the

price label. In Poland, pricing information is displayed according to the location determined by an electronic overlay (col. 1, lines 9-11). When a store person presses overlay 14 onto a shelf display strip 24, tag computer 22 detects the occurrence of overlay 14 being mounted on display strip 24 by polling an aisle controller 26 at a frequent interval (col. 3, lines 39-43). Tag computer 22 searches the product location table in the memory to determine whether the store person mounted overlay 14 in the proper location (col. 4, lines 27-30). In the event tag controller 22 receives an invalid aisle number for a newly mounted overlay 14, tag computer 22 sends an error condition packet to aisle controller 26 indicating the aisle number of the correct location. "In the event the aisle number is correct but the shelf location is incorrect, aisle controller 26 sends buffers to display guiding hints comprised of arrow annunciators and display segments arranged to form indications" (col. 5, lines 6-18). If the new product location is incorrect, the aisle controller leaves the price display blank at the incorrect strip location and asserts the annunciator data to guide the store person as to which direction to move overlay 14 (col. 2, lines 25-29).

From the disclosure of Ahlm, we agree with appellant (brief, page 8) that "Ahlm proceeds from the assumption that the correct label will be attached. If it is not, the unit 10 will display the wrong information." However, we find that in view of the disclosure of Poland that the system ensure placement of the overlay 14 in the correct location, that an artisan would have recognized the importance of placing the display label at the correct location, and would have been motivated to ensure that the display label was provided in the correct location as taught by Poland. Thus, we are not persuaded by appellant's assertion that there is no motivation to combine the teachings of the references, and find that Ahlm and Poland suggest "helping to ensure that the correct type of auxiliary display is attached to the electronic price label" as recited in independent claims 1 and 5.

With respect to appellant's assertion that Ahlm does not suggest "utilizing a plurality of auxiliary displays of different types" we note that this language which appears in independent claims 1 and 5 is defined in appellant's specification (pages 3 and 8) as being defined by the pattern and number of apertures 62. We find that in Ahlm, the pattern formed by the number of lines and their placement on the bar code 14 are akin to the

pattern formed by the number of apertures and their placement on appellant's auxiliary display 24. Thus, we find that each bar code representing a different product on the shelf constitutes a different type of display to the same extent that appellant's auxiliary display with holes represents a different type of display. Accordingly, we find that Ahlm discloses a plurality of auxiliary displays of different types by having a different bar code for different products. We are unpersuaded by appellant's assertion (reply brief, page 4) that the examiner "proceeds to construe the claim language inconsistent with the usage of that language both in the claims and in the description of the present invention" and that Ahlm does not address auxiliary displays and does not address sensing the type of auxiliary display. We find that in Ahlm, each label 14 having bar code 12 is an auxiliary display attached to shelf edge unit 10, and that each display having a different bar code is a different type of display as the each different display represents a different product. With regard to appellant's assertion (brief, page 9) that Ahlm does not disclose determining the type designation of the auxiliary display from the pattern, we further find that the bar code reader and circuitry that fetches the bar code information from the memory in unit 10 of Ahlm discloses the type designation of

auxiliary display, i.e., the type of auxiliary display representing a particular product.

Appellants further argues (reply brief, page 3, see also brief, page 9) that:

> As Ahlm does address reading a bar code 14 from the back of a label 12, but fails to make the present advantageous invention, it should be considered as secondary evidence of nonobviousness, evidence of failure of others in the field.

and that:

> [A]lthough Poland shows different size price labels, it too does not deal with "auxiliary displays" and the sensing of the "type" of auxiliary display as presently claimed, and is also evidence of failure of others.

We disagree with appellant's contention that the disclosures of Ahlm and Poland should be given weight as evidence of secondary considerations of obviousness. We find no separate evidence in the record to establish that Ahlm and/or Poland recognized the problem that appellants faced and tried and failed to solve the problem. In addition, we find that Poland solves the problem of ensuring that the auxiliary display is placed in the proper location, as our discussion makes clear.

From all of the above, we find that the examiner has established a prima facie case of obviousness of independent

claims 1 and 5, which has not been successfully rebutted by appellants.

Turning to claims 2 and 6, appellant asserts (brief, page 9) that Ahlm lacks the elements of these claims. Appellant argues that "Ahlm does not alert 'an operator if the auxiliary type designation in the stored information for the one electronic price label fails to match the determined type designation,'" and that Poland does not remedy the failings of Ahlm. In Poland (col. 5, lines 6-20), if an overlay (auxiliary display) 14 is not placed in the correct location, such as an incorrect aisle, tag computer 22 sends an error condition packet to aisle controller 26 indicating the aisle number of the correct location, which is briefly displayed. Similarly, if overlay 14 is placed on the incorrect shelf, aisle controller 26 sends buffers to display guiding hints comprised of arrow annunciators and display segments arranged to form indications such as LO or HI. Thus, we find that Ahlm does alert an operator if the auxiliary display type designation in the stored information for the one electronic price label fails to match the determined type designation. Accordingly, we find that the examiner has established a prima facie case of obviousness of claims 2 and 6, which has not been successfully been rebutted by appellants.

With respect to the remaining claims, we note that under the heading "Grouping of Claims" (brief, page 6) appellant recites limitations from many of the claims, but does not present any arguments as to why appellants believe these limitations are not taught or suggested by Ahlm and Poland. Under 37 CFR § 1.192(c)(7) "[m]erely pointing out differences in what the claims cover is not an argument as to why the claims are separately patentable." Nevertheless, we will address each of the limitations recited by appellant.

With respect to claims 11 and 12, in view of Poland's disclosure of displaying the correct location in response to overlay 14 being placed in an incorrect location, we find that Ahlm and Poland suggest the claimed "means for alerting an operator of a type mismatch." In addition, we agree with the examiner, for the reasons set forth on pages 4 and 5 of the answer, that it would have been obvious to have displayed the error condition on a monitor or printer in view of Poland's disclosure of both a host computer and a tag computer in the store.

With regard to claims 7, 8, 14, and 15, we find that because Poland's store tag computer 22 searches the product location table in its memory to determine whether the store person mounted

overlay 14 in the proper location on an electronic display strip 24 (col. 3, lines 35-41 and col. 4, lines 28-30), we find that Ahlm and Poland suggest "a remote electronic price label record including a suitability field."

With regard to claims 9 and 16, Poland discloses (col. 3, lines 41-47) that:

> Tag computer 22 detects the occurrence of overlay 14 being mounted on display strip 24 by polling an aisle controller 26 at a frequent interval. Each aisle controller 26 in turn polls each of a multiplicity of gondola controllers 28 on separate serial ports for a change in status of any of the display strips 24 attached to shelves on the same gondola.

From this disclosure of Poland, we find that Poland teaches circuit means (claim 9) or method (claim 16) "operable to redetermine the type designation . . . as auxiliary labels are removed, added or replaced" because polling will detect whether labels are removed, added, or replaced.

With regard to claims 10 and 17, from the disclosure of Poland that an error condition packet is sent to the aisle controller 26 which displays the correct aisle number in the event tag computer receives an invalid aisle number, (col. 5, lines 6-13), we find that Ahlm and Poland suggest an "error condition mechanism (claim 10) or method (claim 17)."

With regard to claim 13, we find that although the specific term "management software" is not used in Poland, we find that the software controlling the price display system of figure 1 constitutes "electronic price label display management software for use with a large plurality of electronic price labels" because the software controls the price display system.

From all of the above, we sustain the rejection of claims 1, 2, and 5-17 under 35 U.S.C. § 103(a).

We turn next to the rejection of claims 3 and 4 under 35 U.S.C. § 103. As evidence of obviousness, the examiner offers Ahlm considered with Poland and Hellsberg. We begin with claim 3. We make reference to the examiner's answer (pages 5 and 8) for the examiner's's position.

Appellants asserts (brief, page 9) that:

> Hellsberg discloses a price tag reader which can read a code by detecting labels or apertures in the tag. As shown in Hellsberg's Fig. 1, a tag reader for reading price tags is fed manually with tags. Prices are then automatically read into a cash register. This teaching is unrelated to electronic price label systems which operate in conjunction with different types of auxiliary labels.

Claim 3 recites that "the auxiliary display recorders comprise a number of photosensors, wherein the indicators comprise a number of apertures up to the number of photosensors through which light

to the photosensors passes to produce signals to the circuit means."

We find that Hellsberg (col. 1, lines 10-15) is directed to a reader for coded price tags. The price tags have machine readable code, normally in the form of a hole code. The tags are fixed to merchandise sold in retail stores and are referred to as Kimball tags. The tags are brought one by one in front of a row of photo detectors, which receive light through code holes which are punched in the tags (col. 1, lines 47-49). As shown in figure 3, there are 12 rows, each containing 10 different positions for holes, which are read by 10 light sensors 18 (col. 5, lines 35-42), such that each of up to 10 holes in a row is read by a separate sensor. Hellsberg further discloses (col. 2, lines 1-8) that;

> It is also an object to obtain a machine of the safe type which can read tags of other kinds, e.g. the code type called UPC in the USA and EAN in Europe, and which is a bar code. According to a special aspect of the invention, it is also an object to make changes in price easy in a shop where the merchandise is marked with tags, e.g. when there is a sale or promotional event.

From the teaching of Hellsberg that it is an object of the invention to read tags of other kinds, i.e., UPC bar code tags, in addition to hole code tags, we find that an artisan would have been taught the interchangeability of hole code and bar code

price tags and would be motivated to replace the bar code labels of Ahlm with hole codes. We are cognizant that the hole code tags of Hellsberg are fed into the reader before being read, however, claim 3, as broadly drafted, does not preclude an auxiliary display tag having hole codes which are fed to the reader, in contrast to an auxiliary display having a type designation that is placed on the reader, as in Ahlm and Poland. We therefore find that the examiner has established a prima facie case of obviousness of claim 3 which has not been successfully rebutted by appellants. Accordingly, the rejection of claim 3 under 35 U.S.C. § 103(a) is sustained.

We turn next to claim 4. Appellants refer (brief, page 6) to "push button switches employed as auxiliary display recorders" as an "additional subject matter grouping" under the heading of "Grouping of Claims" but do not present any specific arguments with respect to the claim.

Claim 4 recites that "wherein the auxiliary display recorders comprise a number of push button switches; wherein the indicators comprise a number of apertures up to the number of push button switches through which push button switches protrude to provide the signal." The examiner's position (answer, page 5) is that "[i]t further would have been obvious to have included a

plurality of push button switch sensors instead of the optical sensors of Hellsberg since these are well known equivalents for machine reading of codes defined by holes or apertures." Although we agree with the examiner to the extent that the use of push button switches are known, claim 4 additionally requires that the push button switches extend through the apertures to provide the signals, which is not taught or suggested by the prior art. Thus, we find that the examiner has not addressed all of the limitations of claim 4, and has therefore failed to establish a prima facie case of obviousness of claim 4. Accordingly, the rejection of claim 4 under 35 U.S.C. § 103(a) is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1-3 and 5-17 under 35 U.S.C. § 103(a) is affirmed. The decision of the examiner to reject claim 4 under 35 U.S.C. § 103(a) is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136 (a).

AFFIRMED-IN-PART

JAMES D. THOMAS Administrative Patent Judge	)	
HOWARD B. BLANKENSHIP Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
STUART S. LEVY Administrative Patent Judge	)	

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